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SENSITIVE UNVIE FOR SANDBERG/AMADEO/OSTROWSKI - NSC FOR BNILSON

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TAGS: ETTC KSTC PARM PREL PTER

SUBJECT: GUIDANCE FOR SEPTEMBER 15 - 26 WASSENAAR EXPERTS GROUP MEETING

STATE 35469 Spring EG Guidance REFS: A)

- B) UNVIE Vienna 291 Spring EG Report
- C) STATE 66847 Intersessional EG Guidance UNVIE Vienna 427 Intersessional Report D)
- $\underline{\mathbb{1}}1.$ (U) This cable provides guidance for the U.S. Delegation to the September 15 -26, 2008 Wassenaar Arrangement (WA) Experts Group (EG) meeting in Vienna.
- 12. (U) USDEL should seek EG consensus on US objectives as articulated in this and previous EG guidance, the December 2007 plenary and interagency discussions. USDEL may accept counterproposals, deletions, or modifications of proposals when there is consensus among agency policy representatives that they will further such objectives. Specific instructions by category are provided below. USDEL will chair the Low-Light Level (LLL), Infrared Sensors and Associated Cameras Technical Working Group (TWG) and the Neural Networks (NN) TWG. USDEL may assist the work of the EG in chairing other TWGs as appropriate for furthering U.S. interests.
- 13. (U) USDEL should introduce US non-papers on Carbon Fiber and Prepreg Materials, and Dry Carbon Fiber Materials for Aircraft Repair. Talking points for these non-papers are listed in section XIII of the guidance below.
- 14. (U) USDEL is encouraged to enter into active discussion of the non-papers presented by other delegations.

_____ Plenary Mandates _____

- Neural Networks (NN) TWG
- 15. (SBU) The results of the intersessional NN TWG are recorded in WA-EG (08) TWG 019. The intersessional TWG was unsuccessful at resolving divergent opinions on the meanings of "neural network integrated circuit" and "neural computer". The result of this lack of a common understanding means that the current controls are not implemented in a consistent way by all participating states. Three possible solutions were left open by the TWG as a way of clarifying NN controls: 1) revising definition of neural networks, 2) adding parameters such as the number of internal "computational nodes", sizes of the input and/or output vectors and clock speed, or 3) adding a note to the current NN control text that Field Programmable Logic Devices (FPLAs) and Application Specific Integrated Circuits (ASCICs) regardless of how they are employed should be controlled by the existing controls for FPLAs and ASICs.
- 16. (SBU) Options 1 and 2 are unlikely to be resolved in

the space of the Fall EG. Option 3 that clarifies implementation of the current controls would seem to have a greater chance of resolution during the Fall EG. USDEL should support the continued work of the NN TWG with a goal of developing a common understanding that is applied consistently by all WA Participating States. USDEL may support continued work by the NN TWG in 2009 based on the results of the NN TWG during the Fall EG and the support of other states to continue the work.

Low Light Level (LLL) and infrared sensors and cameras $\ensuremath{\mathsf{TWG}}$

17. (SBU) The intersessional meeting on of the LLL TWG produced a list of possible options for resolving a number of the problems it was tasked to examine. The results can be found in WA-EG (08) TWG 018. Guidance for each of these issues is as follows:

- <u>¶</u>A. Multialkali Photocathodes: USDEL should support a solution that would simplify the current text of 6.A.2.a.2.a.3. and 6.A.2.a.2.b. by deleting the decontrol note and creating a positive text in both. 6.A.2.a.2.a.3.c. should read: "c. Other "III/V compound" semiconductor photocathodes having a maximum radiant sensitivity exceeding 10 mA/W;". 6.A.2.a.2.b.3. should read: "3. "III/V compound" semiconductor (e.g. GaAs or GaInAs) photocathodes and transfer electron photocathodes having a maximum radiant sensitivity exceeding 15 mA/W;".
- 1B. Sensors used in Remote Sensing (DE005): USDEL should reserve on the solution proposed in DE005 that would remove sensors or cameras having interchangeable lenses and on moving this control to 6.A.3. USDEL should support a solution that would:
- Leave the chapeau unchanged, but supports further discussion in the LLL TWG in 2009 to examine refining the definitions of "monospectral imaging sensors" and "multispectral imaging sensors" and to update the current 6.A.2.b. controls.
- Replace the decontrol note proposed in DE005 with the following decontrol note: "6.A.2.b.1. does not apply to "monospectral imaging systems" limited by design to incorporate only non-"space qualified" Charge Coupled Devices (CCD) or Complimentary Metal Oxide Semiconductor (CMOS) based detectors or "focal plane arrays" not specially designed or modified to achieve 'charge multiplication' with a peak response in the wavelength range exceeding 300 nm but not exceeding 900 nm."
- **C. Direct View Imaging Equipment and Cameras: There is currently no consensus within the interagency as how to solve this problem. USDEL should collect the views of other delegations within the LLL TWG and defer resolution of this issue until 2009. There is another issue related to both the remote sensing discussion in paragraph B above and this paragraph on direct view imaging equipment that merits further TWG discussion. That issue is where is the dividing line between and Optical Sensor (6.A.2.) and a Camera (6.A.3.). Advances in technology associated with miniaturization will continue to blue the lines between these two. Also modern production techniques lead to greater specialization which in turn leads to increased trade in assemblies that may be treated differently in different WA participatin states. If that is the case, it potentially makes the controls less effective.
- 1D. Space Qualified: USDEL should support a solution that would eliminate the current ambiguity in the control text that could be interpreted that "space qualified" focal plane arrays are not "space qualified"

detectors. USDEL should support the following solution that would not result in a change of the scope of control:

- Add a note immediately after 6.A.2.a.1. that reads: "6.A.2.a.1.a., b. and c. include "focal plane arrays".
- Add a new sub-item d that reads: "Space qualified"
 "focal plane arrays" having more than 2,048 elements per
 array and having a peak response in the wavelength range
 exceeding 300 nm but not exceeding 900 nm."
- Deletes 6.A.2.e.
- Modifies the Sensitive List by 1) adding a reference to 6.A.2.a.1.d., 2) deleting the reference to 6.A.2.e. in 6.A.2.c. and 3) deleting the reference to 6.A.2.e. in 6.A.3.b.4.
- ¶E. Definitions: USDEL should encourage completion of the other tasks before the TWG embarks on an open-ended discussion of definitions.
- 1F. Software to control frame rate: The U.S. has submitted US016 Rev 2 as a result of discussions during the intersessonal TWG. Talking points are listed in Category 6.
- **IG. Underwater cameras: USDEL should support the revision of the current text in Category 8 to bring it into line with changes made in Category 6 in 2007. USDEL should listen to the views of others with respect to moving camera controls in Category 8 to Category 6. USDEL may engage in a preliminary review of the associated problems that would need to be addressed to make such a move. USDEL may also support a plenary mandate for 2009 to examine in detail the implications of moving control text for underwater cameras to 6.A.3. USDEL may support revising 8.A.2.f. to remove the current decontrol note and align the control text with the changes made in Category 6 in 2007 to control devices using charge multiplication as follows:
- f. Electronic imaging systems specially designed or modified for underwater use and having any of the following:,
- 11. Image intensifier tubes by specified by 6.A.2.a.2.b. or 6.A.2.a.2.b; or 12. Non-"space-qualified" "focal plane arrays" specified by 6.A.2.a.3.q.;
- 1H. Performance based controls for cameras: USDEL may actively participate in an exploration of benefits, disadvantages and complexities of developing performance based controls for cameras. USDEL may support an EG request for a plenary mandate that would continue to explore this issue in 2009.

Global Navigation Satellite Systems (GNSS) TWG

18. (SBU) The GNSS TWG opened the door for achieving long standing U.S. objective with respect to the control of GNSS receivers (Ref B). USDEL should support the text in WA-EG (08) 005 for 7.A.5. incorporating option 1.

USDEL may draw on the following points:

- -- The U.S. very much appreciates the work done in the GNSS TWG during the April meeting.
- -- The U.S. would like to thank Mr. Peter Szorenyi for his very able leadership of that TWG.
- -- The U.S. hopes that the Fall EG will be able to come to consensus following the progress made on this issue during the Spring EG.

Improvised Explosive Devices (IED) related technologies TWG

19. (SBU) The work of the IED TWG was split into two parts during the Spring EG (REF B) and resulted in separate reports on electronic and explosive detonators, WA-EG (08) TWG 002 Rev 1, and on jamming devices for remotely controlled IEDs, WA-EG (08) TWG 006. There was no intersessional work on either of these issues. Two sessions are scheduled during the Fall EG. Guidance in REF A is still pertinent with respect to proposals for control of detonators in Category 1. With respect to jamming devices for remotely controlled IED's, USDEL should continue to support the alternative text it tabled during the Spring EG.

Vessels (ML) TWG

110. (SBU) A significant amount of time was devoted to the revision of ML9 during the intersessional meetings (REF D). Canada submitted a non-paper, WA-EG (08) CA 008, that focused the vessels discussion on ML9 and away from Category 8. CA008 served as the basis for discussion during the intersessional meetings. USDEL should continue to work within this TWG to clarify the text in ML9. Guidance for CA004 and GB014 is in Category 8. Guidance for CA005 and GB018 is in Category 16.

Dialogue with MTCR's Technical Expert Meeting (TEM)

111. (SBU) The intersessional TWG on EG/TEM dialogue was very productive (REF D). The results of this work are reported in WA-EG (08) TWG 016. USDEL should support the EG chair providing this document to her TEM counterpart as a means of identifying potential future topics for a continuation of this dialogue.

Chairman's Issues (TFEI)

- 112. (SBU) The Spring EG approved 7 of the 9 changes WA-EG (08) Chair 003 Rev 1, Annex I, and all the change in Annex III. For items raised in Annex II, USDEL should maintain that those items should be the subject of national proposals as resolving these items goes beyond the purely editorial. USDEL should engage the Chair on how the EG will address editorial issues in the future. Various ideas have been proposed, such as setting aside time during the Spring EG to review changes made in the list the previous year, but no concrete proposals have been discussed. USDEL could support a "friends of the chair" group that would develop such proposals for EG discussion. Without some mechanism for annual editorial review of list changes, eventually the inconsistencies found in the list in 2007 will reemerge.
- 113. (SBU) USDEL can support a review to the Guidelines for Drafting the List. Additions that explain common Wassenaar usage could be a useful addition to the guidelines and would help to insure that all 40 participating states interpret the text in a similar manner. USDEL may also engage in discussions about the usefulness of putting the guidelines on the WA web site as a means of expanding the understanding of WA control lists.

1. CATEGORY 1 - ADVANCED MATERIALS

1A. (SBU) Category 1 Title. New Title. GB013 Rev 1. This proposal would change the title of Category 1 from "Advanced Materials" to "Materials and Protection

Equipment". The U.S. supports the concept of changing the title of Category 1 to more accurately reflect it contents, but it is not clear that the current proposal achieves that goal. Materials is an extremely broad classification and it is not clear that all of the items currently in Category 1 are captured by "Materials and Protective Equipment". USDEL should strive for a title that accurately reflects the contents of Category 1 and may agree to a change that garners consensus. USDEL may draw on the following talking points:

- -- The U.S. supports the concept of changing the title of Category 1 to more accurately reflect its contents.
- -- We are not sure that the UK proposal catches everything currently specified in Category 1.
- -- Are detonators in 1.A.7. protective equipment?
- -- The U.S. looks forward to working with other delegations to find a solution to this problem.
- 1B. (SBU) 1.A.2. Note 2. Modification (additional exclusions). DE002. This proposal decontrols finished and semi-finished composite structures or laminates used in production equipment for mono- and polycrystalline silicon and wafers, and metal treatment furnaces. USDEL should ensure that items currently controlled in Categories 2 and 3 remain controlled and are not decontrolled by DE002. USDEL may join consensus if the following concern is adequately met:
- -- The U.S. understands that Germany believes that these new decontrols for certain production equipment and metal treatment furnaces would not apply to items that are currently controlled in Categories 2 and 3.
- -- Items currently listed or controlled as "components therefor" will remain controlled.
- -- The U.S. would like to find a way to make this clear not only to all Participating States, but also to exporters who might misinterpret the proposed decontrol.
- -- With respect to the decontrol for production equipment for mono and polycrystalline silicon and wafers, the U.S. has a number of questions:
- --- The U.S. would appreciate some examples of the actual equipment to which Germany thinks this decontrol might apply.
- --- The U.S. would also appreciate being able to see some examples of the finished or semi-finished items that would be subject to this decontrol.
- -- Based on the pictures in DE002, the U.S. has concerns that some of those parts could be diverted for use in rocket motors. The long cylinders look very similar to some composite parts that are used in the U.S. for rocket motors.
- To prevent diversion to rocket motor cases, the decontrol should be limited to 1.A.2.b.1. materials. The U.S. believes that DE002 deals with carbon fiber reinforced graphite, or carbon-carbon. If control is maintained on organic resin composites the risk of diversion will be decreased.
- -- The U.S. would also like to see the word "heat'" added to item "f" so that it reads "metal heat treatment furnaces". This is to distinguish heat treatment furnaces from casting or melting furnaces.

IF NEEDED:

-- USDEL does not believe that it is possible to identify crystal growing equipment and metal treatment

furnaces that are 'purely civilian' and therefore neither are their components. Doesn't this make this decontrol an empty box?

- 1C. (SBU) 1.A.4. Clarification of controls on decontamination equipment. CA003. This proposal attempted to clarify the control text on decontamination equipment by removing the word "therefor." During the Spring EG, it became clear that this proposal is more complex than originally thought and Canada said that it intended to produce a revised text. Canada now indicates that as this case is more complicated than it originally thought, it does not plan to pursue this proposal any further this year. USDEL should maintain its study reserve pending further proposals from Canada.
- 1D. (SBU) 1.C.8. Note 1. Clarification of control in non-fluorinated polymeric substances. FR001, US001 and CRP003. As a result of informal consultations during the Spring EG FR001 and US001 were combined into CRP003. USDEL should support the addition of "fusible" to note 1, the Nota Bene referring to 1.A.3. and the Technical Note defining fusible. USDEL should work with the French delegation and others to find acceptable language for note 2. USDEL cannot agree to note 2 unless the French delegation can provide both a substance and its percentage that is in the paint or varnish that makes recovery of the non-flourinated polymeric substance difficult. In the case of bismaleimides and armotic polyimides, USDEL should consult with Washington before any agreement. USDEL may draw on the following points:
- -- The U.S. appreciates the positive work done in developing CRP003 during the Spring EG.
- -- Non-fluorinated polymeric substances are often dissolved in a solvent. They may be dissolved in a solvent both for shipping and also for ease of manufacturing. It would be hard to distinguish between a paint or varnish and a of non-fluorinated polymeric substance suspended in a solvent for future use. Thus a decontrol as specified in the note 2 of CRP003 without any qualification would seem to create a loophole for controlling these substances.
- -- We are ready to meet with interested parties to try to resolve this issue.
- 1E. (SBU) 1.C.10.b. Notes. Updating JIS (Japanese Industrial Standard) referred in the Technical Note. JP002. During the Spring the EG agreed to delete reference to a Japanese Industrial Standard (JIS) that has been repealed. The remaining portion of this proposal involves the ISO-10618 reference. Based on a review of the SACMA and ISO standards, USDEL may join consensus to adding the ISO 10618 as proposed in JP002. USDEL may draw on the following points:
- -- The U.S. can support JP 002
- -- A review of the SACMA SRM 16-90 and ISO-10618 shows they are fairly similar. The main difference is that the ISO standard allows additional materials in the test process. The revised Technical Note allows Participating States three options for determining material properties. Countries are still free to use their national test methods.
- 1F. (SBU) 1.C.10.a. Notes. Two new decontrol notes to 1.C.10.a. for aramid "fibrous or filamentary materials". RU001. This proposal seeks to harmonize aramid fiber control with the Nuclear Suppliers Group (NSG) and establish a new class of decontrol notes that would allow for license free export of samples that were to be returned to the exporter. During the intersessional meetings, the Russian delegation made a detailed presentation concerning this proposal. Unfortunately,

the presentation raised as many questions as it answered. USDEL should remain on Study Reserve on this proposal. USDEL may draw on the following points:

- -- The U.S. appreciates the additional information provided by the Russian delegating during the summer intersessional meeting with respect to RU001.
- -- The WA controls these fibers for additional purposes that are not of concern to the NSG. Therefore, it may be appropriate that WA controls do not match those of the NSG.
- -- As an example, the N.B. in 1.A.5. makes clear that the Wassenaar Arrangement controls 1.C.10.a. materials for reasons that are not covered by the NSG.
- -- Our study has shown that the surface modification of the fibers assists in both making soft armor as well as hard or composite armor.
- -- U.S. patent 5,229,199, for example, is a Dupont patent for rigid composites for impact resistance. The rigid composite used aramid fibers coated with 0.2 to 5% of 2-perfluoroalkylethyl ester.
- -- The U.S. believes that incorporating the proposed Note 2 would conflict and create an ambiguity with the current control in 1.A.5.
- -- With respect to Note 3, the U.S. is concerned about enforcement of this proposal. The U.S. has no mechanism for registering the return of the item as proposed in Note 3.
- -- The U.S. is also concerned about controls that are based on a limited amount of material or items. Such an exclusion could be applied throughout the lists and would tend to make the control text ineffective.
- -- The U.S. does not believe that Note 3 is an appropriate decontrol note for the Wassenaar dual-use list. It involves larger questions of national implementation that are not properly the question of the EG.

II. CATEGORY 2 - MATERIALS PROCESSING

1A. (SBU) 2.B. Technical Note 5 - Adding rotary axis to the Technical Note. JP003. This proposal applies the same standard (ISO 230/2 (1997)) to determine accuracy for rotary axes as currently exists for linear axes. This proposal strikes the word "linear" as it modifies "axis accuracies" for machine tools. Several delegations raised questions about this proposal during the Spring EG. Japan requested more time to study the issues raised. No tour de table was taken. USDEL should place a study reserve on JP 003 pending additional clarifications from Japan. If other delegations reach consensus on this change and the U.S. receives adequate clarifications, USDEL may join a consensus on removal of "linear" from Technical Note 5. USDEL may draw on the following points:

- -- During the Spring EG the U.S. listened carefully to the concerns raised by others with respect to JP003.
- -- -- USDEL believes ISO 230/2 (1997) applies to both linear and rotary axes, but would like the concurrence of other delegations on this view.
- -- The U.S. notes that the current control text is not consistent in setting standards for measuring accuracy. We note that the parameters specified for a rotary axes in 2.B.1.e.2.b., 2.B.6.b.2., and 2.B.8.b. are not in accordance with any standard. The U.S. is interested in

the views of others as to whether the ISO reference should be applied to these rotary axis parameters.

- 1B. (SBU) 2.B.1. Note 2. Modification of Technical Note 2 c. DE003. This proposal changes the decontrol note to "conform" to the NSG control. The proposal seeks to change "Extruder worms" to "Worms or (screw) threads". During the Spring EG, an alternate formulation went into the Category 2 working paper that reads, "Worms [or external threads]". Only the USDEL and the UK are on study reserve for this revised formulation. USDEL should maintain a study reserve unless there is a clear understanding to the limits of this decontrol. USDEL may draw on the following points:
- -- To better understand this proposal the U.S. would like to know if 'external worms' are produced on special purpose machines?
- -- In the U.S. understanding, screws, threads, and external threads are a broad category of components. The example provided notes tools capable of production of compressor rotors. Other critical thread shaped components include ball screws, turbine parts and propeller blades. The U.S. is concerned that opening the decontrol to include screws and threads will create a significant loophole in machine tool controls.
- -- How might the text be worded to limit the extent of the decontrol?
- -- The U.S. is concerned that the machines given as examples to be decontrolled appear capable of producing products beyond simple screws or worms.
- 1C. (SBU) 2.B.6. Coordinate Measuring Machines (CMM). US002 Rev 1. This proposal removes the language referencing a slope of L/1000, related to the maximum permissible error (MPEE) of indication parameter; adds new control language for specifying the quality of the measurement probe used to determine the accuracy of the CMM through the use of unidirectional repeatability at 2 sigma of better than 0.35 um; and proposes positive text in the chapeau to replace the decontrol note for CMMs controlled because only a small measuring range is better than 1.7 um with. If other delegations insist on retaining a reference to a slope of 1/1000, USDEL should not block consensus. USDEL may draw on the following points:
- -- The U.S. appreciates all the positive feedback that we had on this proposal during the Spring EG and has issued a revised proposal taking those comments into account.
- -- The U.S. believes that deleting the reference to $\rm L/1000$ will clarify and simply this control.
- $\mbox{--}$ MPEE of CMMs is measured using a probe and the quality of the probe is critical in accurately determining the MPEE.
- -- Probes have an associated error that can be calculated according to ISO standards; however, probe manufacturers typically specify probe repeatability in their brochures. It is easier to use the probe repeatability specified by the probe manufacturer than to use the ISO calculation which would need to be based on measurements made on a high quality CMM to verify the probe quality. Therefore the U.S. has added a probe repeatability parameter
- -- To take account of machines that meet the accuracy parameter only over a short range, a 70 mm measuring length was added as a threshold to the accuracy parameter to release such machines.

-- If countries object to the use of 2 sigma to characterize the probe, USDEL would be receptive to alternative language such as "or measured in accordance with the probe manufacturer's specifications/test procedures." Note that in the machine tool ISO standard (ISO 230/2), 2 sigma is embedded in the accuracy calculation.

III. CATEGORY 3 - ELECTRONICS

- ¶A. (SBU) (SBU) 3.A.1.a.7. and 10. Field Programmable Logic Devices (FLPD) and Custom Integrated Circuits. JP005. The proposal relaxes control levels on these products. Considerable progress was made on this proposal and US017 at the intersessional meetings (Ref D). Japan agreed during the intersessional meetings to delete the parameter for "basic gate propagation delay time" (BGPDT) from 3.A.1.a.7. leaving US017 as the sole proposal addressing 3.A.1.a.7. With respect to the part of JP005 which addresses 3.A.1.a.10. (custom integrated circuits with unknown functionality), USDEL has engaged the Japanese delegation over the possibility of setting the BGPDT at .02 ns vice the Japanese proposed .01 ns. USDEL may join consensus on JP005 provided the BGPDT is set at .02 ns. USDEL may draw upon the following points:
- $\mbox{--}$ We appreciate the work done on JP005 during the intersessional meetings.
- -- We understand that Japan is now willing to drop the "basic gate propagation delay time" from 3.A.1.a.7.
- -- The U.S. can support raising the number of terminals from 1,000 to 1,500 in 3.A.1.a.10.
- -- The U.S. can also support some relaxation in the 'basic gate propagation delay time" in 3.A.1.a.10. However, the U.S. has concerns with relaxing the BGPDT to 0.01 ns. The U.S. could accept a relaxation of BGPDT to 0.02 ns.
- 1B. (SBU) 3.A.1.a.7. FPLD's. US017 Rev 1. This proposal updates the FPLD control text. Good progress was made on this text during the intersessional meetings. USDEL may draw upon the following points:
- $\mbox{--}$ We believe that after work during the intersessional US017 may be close to achieving consensus.
- -- We understand that Japan may now be willing to accept deletion of the to BGPDT parameter from 3.A.1.a.7.
- -- USDEL stands ready to answer any questions that other delegation may still have with respect to US017.
- 1C. (SBU) 3.A.1.b.10/3.A.2.d. Phase Noise Instrumentation. US003 Rev 1. This is a proposal to add a new control for low-phase-noise oscillators and to update the current control parameters for certain microwave low-phase noise frequency synthesized signal generators. It attempts take into account the current state of dual-use products and to address products whose performance makes them of concern. After consultation with interested delegations between sessions, the U.S. submitted a revised proposal. This revised proposal adjusts the scope of control of the original US003 in that it removes the 3.2 GHz frequency floor the proposed new 3.A.1.b.10. control for component-level oscillators and oscillator assemblies (controlling more oscillators and oscillator assemblies). The revision adds a 3.2 GHz frequency floor to the revised 3.A.2.d.4. signal

generator control (controlling fewer frequency
synthesized signal generators). USDEL may draw on the
following points:

- -- This proposal adds a new component control for low-phase noise oscillators and oscillator assemblies in 3.A.1.b.10. and revises the current test-equipment control for frequency-synthesized signal generators in 3.A.2.d.4. After intersessional consultation with interested delegations and reflection, the U.S. has submitted US003 Rev1
- -- During the intersession, it was determined that low-phase-noise oscillators and oscillator assemblies below 3.2 GHz are also of concern. The U.S. therefore revised its original proposal to address this concern. A revised frequency floor of 150 MHZ is thus proposed to capture items of primary military interest while avoiding widely used commercial items.
- -- These devices are especially useful in designing, building and testing advanced Doppler radars which can provide moving object detection in clutter.
- -- The U.S. also proposes to modify the phase noise control parameters for frequency synthesized signal generator test equipment. the revised proposal, this change will control low phase noise microwave test equipment which is of concern, while at the same time releasing test equipment below 3.2 GHz.
- 1D. (SBU) 3.A.1.c. Acoustic Wave Devices. JP006 Rev 1. This proposal adds "frequency side-lobe rejection" as a local definition and relaxes controls on these devices. Following the intersessional meetings, Japan has tabled a revised proposal attempting to take into consideration concerns expressed by the U.S. and others. Japan accepted the U.S. suggestions that "frequency side-lobe rejection" should be a local and not a global definition and that the note should refer to "band pass, low pass, high pass or notch filtering." USDEL may support JP006 Rev 1. USDEL may draw upon the following points:
- -- The U.S. appreciates Japan's efforts to take concerns expressed by the U.S. into consideration.
- -- The U.S. is now in a position to support JP006 Rev 1.
- 1E. (SBU) 3.A.1.f. Rotary Absolute Position Encoders. DE004 and GB024. The proposal would liberalize the control on rotary absolute position encoders. During Spring EG, Germany withdrew DE004 in favor of the UK counterproposal GB024. Following the intersessional meetings, the U.S. has provided alternative language to the UK. USDEL can agree to GB024 provided that the words "an integral solid or hollow shaft and" are deleted. USDEL may draw on the following points:
- -- We are concerned that the proposed UK text decontrols pancake encoders.
- $\mbox{--}$ The U.S. believes pancake encoders are and should continue to be controlled as they are enablers of military systems.
- -- Our interpretation is that encoders measure the rotation of a shaft and do not require the presence of a shaft as part of an encoder. What is important is the accuracy of the encoder, not whether it has a shaft.
- -- To address this problem, we suggest deleting the words, "an integral solid or hollow shaft and" from ${\tt GB024}$.

Note to USDEL: USDEL may provide a counterproposal with the suggested text in the tick above.

- ¶F. (SBU) 3.A.1.h. High Temperature Power Switches. US004 Rev 1. This is a proposal for a new control on a new class of dual-use electronic component. The U.S. was able to collect valuable information from other delegations during the summer intersessional meetings. USDEL may draw on the following points:
- -- The U.S. has revised this proposal based on very useful discussions during the summer intersessional.
- -- Based on information presented by other delegations, the U.S. has agreed to raise the temperature threshold to 215 degrees C and the voltage threshold to 300 V.
- -- Based on the best available information, this will keep this proposed control from affecting mass-market devices for electric hybrid vehicles in the near-term.
- -- The high-temperature power switches which would be caught by this control are of great utility in many military systems.
- -- Because they can tolerate higher temperatures, they are better able to tolerate a battle environment.
- -- They also do not have the stringent cooling requirements that lower-grade components have, saving weight and power budgets and providing more design options to weapons system designers.
- $\mbox{--}$ We look forward to answering any questions that other delegations may have.

IF NEEDED

- -- The U.S. would be willing to accept a 2 year validity note, if that would help others reach agreement on this proposal.
- **IG. (SBU) 3.A.2.d. Note 3. Frequency Synthesized Signal Generators. FR002. This proposal adds a Note stating that single master reference oscillators are controlled by 3.A.2.d. A fruitful exchange of information between U.S. and France did occur in the intersessional, and the U.S. believes that the revised US003 satisfies both U.S. and French concerns. USDEL may draw upon the following points:
- --The US believes that US003 Rev. 1 accomplishes the objective of FR002.
- --The US hopes that France and other delegations will be able to support US003 Rev. 1.

If FR002 not withdrawn:

- --Although U.S is sympathetic to the goals of FR002, there are several difficulties with FR002 as presented:
- --3.A.2., and in particular 3.A.2.d.4. controls electronic test equipment, not oscillator components or assemblies.
- --FR002 attempts to expand the scope of control of 3.A.2.d.4. with a Note.
- --A more appropriate location for a new control for components and assemblies is 3.A.1. US003 Rev. 1 attempts to solve this problem.
- ¶H. (SBU) SL/3.A.2.g. Revision to atomic clocks entry in SL. GB008 Rev 1. This proposal corrects the SL to match the changes made in the control for atomic clocks made in the basic list in 2007. USDEL should support this proposal. Only Russia was on study reserve at the end of the Spring EG.

11. (SBU) 3.B.1.h. Multi-layer Masks with a Phase Shift Layer. JP007. This proposal deletes the control text for multi-layer masks with a phase shift layer. The original intent of this control was to control all such masks and the technology for producing them. USDEL will receive supplemental guidance on this proposal.

- 1A. (SBU) 5.A.1.f. Further amendment to Dual-Use Jammer control. GB003 Rev 1. This proposal seeks to add a control for jamming equipment that relies on the specific characteristics mobile phone telecommunications protocols. GB has identified jamming equipment which exploits certain mobile telecommunications equipment based on design characteristics without actually having to detect a signal. The revised GB003 does not change the existing controls it only adds to them. USDEL may agree to this proposal with edits noted below. USDEL may draw on the following points:
- -- The U.S. wants to thank the UK for the revised version of this proposal issued during the Spring EG.
- -- It leaves the current control text unchanged and adds a new type of equipment that the UK has identified that functions in this area.
- -- The U.S. can support this addition.
- -- The U.S. believes that the following editorial changes should be made:
- --- The verbs in the sub-entries should be changed to "simulate", "detect", and "exploit" to be consistent with the chapeau.
- 1B. (SBU) 5.D.1.e. C3I & C4I Software. GB006. This proposal adds a dual use control for software specially designed for Command, Communications, Control and Intelligence (C3I) or Command, Communications, Control, Computer and Intelligence (C4I) applications. During the intersessional meeting, strong reservations were expressed about this proposal, including in a paper presented to the UK government by its own industry. The U.S. anticipates that the UK will withdraw this proposal. If not withdrawn, USDEL should remain on study reserve. USDEL may draw upon the following points:
- -- The U.S. appreciates the insights shared during the intersessional meetings by the UK delegation on this proposal.
- -- Based upon this information and further review, the U.S. believes that more time is needed to fully understand the possible implications of a dual-use control for commercial C3I and C4I software.
- ¶C. (SBU) 5.E.1.c.2.d. "Update to 5.E.1.c.2.d." Liberalization of Wavelength Division Multiplexing (WDM) technology control). US011 and JP014. These proposals would liberalize the technology controls on WDM. USDEL should support JP014 and withdraw US011. If Germany insists on dropping the N.B. referencing laser controls in Category 6, USDEL should not block consensus. USDEL may draw upon the following points:
- -- Having reviewed JP014, the U.S. is now ready to withdraw US011 in favor of JP014.

- ¶D. (SBU) 5.E.1.c.6. Technology for Ultraviolet (UV) Non-Line-of-Sight (NLOS) Communications Systems. US010. This US proposal is for a new control on a new technology, which is finding uses on the battlefield and, from US regulatory experience, is also finding non-military uses. USDEL may draw upon the following points:
- -- The U.S. would like to emphasize that this proposal is strictly a technology control and does not control any equipment.
- -- Military uses for this technology have been demonstrated, but the same attributes that make this technology militarily useful will also make it commercially useful as a wireless-networking technology.
- -- The U.S. believes that the potential of this emerging technology makes it appropriate to establish a dual-use control.

IF NEEDED

- -- The U.S. would be willing to accept a 2 year validity note, if that would help other reach agreement on this proposal.
- 1E. (SBU) 5.E.1.d./5.E.1.e. Technology for electronic devices which are specially designed for telecommunications. US012 Rev 1. This proposal for new telecommunication technology controls attempts to reduce any confusion that may exist between the controls in Category 3 and those in Category 5 for similar items. USDEL should seek consensus on this proposal. USDEL may draw upon the following points:
- -- The goal of this proposal is to reduce possible ambiguity in the current control text as to whether the technology for the "production" and "development" of MMIC power amplifiers and superconducting filters that are controlled in Category 3 are also controlled in Category 5 Part 1 when this technology is used for the "production" and "development" of telecommunications applications.
- -- Based on input during the Spring EG the U.S. revised its proposal adding the actual controls in Category 5 Part 1 to further clarify the intent of this control.

VI. CATEGORY 5 PART 2 - INFORMATION SECURITY

- __A. (SBU) 5.A.2.a.7. High assurance "ICT security" systems and devices. AU002. This proposal adds a control for high assurance non-cryptographic devices such as data diodes, content filters (guards) and Multiple Independent Levels of Security (MILS) kernels. The U.S. sympathizes with the intent of this Australian proposal. However, the U.S. has reservations about using a control parameter that is defined by an organization to which only 21 of the 40 WA participating states belong and that does not have an agreed definition among the states that are signatories to the Common Criteria Recognition Agreement (CCRA). It is not clear how such a control could be implemented by WA states that are not participants in the Common Criteria process. Finally there is a problem with a parameter that is based on a voluntary test. USDEL should not block consensus on this proposal, if all others agree provided that the control parameter is raised to EAL 6+. USDEL may also support the use of a validity note for this proposal if that appears to be necessary. USDEL may draw on the following points:
- -- The U.S. understands and supports the intent of AU002.

- -- However, the U.S. has a number of concerns about how it would be implemented.
- -- The U.S. has concerns about a performance parameter that is set by another organization being adopted as a WA control parameter. The U.S. has not been able to identify another instance of this in the control list.
- -- The U.S. is also concerned about how different participating states will understand and implement the proposed control parameter.
- -- Finally, the U.S. understands that the Common Criteria Recognition Agreement states periodically review and amend the definitions of the various EAL levels. If that is the case, it would seem that any such changes that would effect WA dual-use controls should also be reviewed by the EG.
- 1B. (SBU) 5.A.2. Definition of "Personalised smart card". DE001 Rev 1. This proposal would expand the definition of smart card and would thereby expand the smartcard decontrol Note. The German revision of this proposal during the Spring EG more clearly tied this decontrol to electronic passports. The USDEL should continue to support this proposal.
- 1C. (SBU) 5.A.2. Note h. Decontrol of special equipment designed for service of mobile devices that fulfill criteria set in Cryptography Note 3 in Category 5, Part 12. FI001 Rev 1. This proposal appears to build upon where SE001 stood at the conclusion of the September 2006 EG. This proposal for a new decontrol Note seeks to decontrol a specific set of service tools and test equipment (and associated operation technology and software) for mobile handsets. USDEL worked with the Finnish delegation to produce the revised proposal which the U.S. then supported. USDEL should continue to support this proposal.
- 1D. (SBU) 5.A.2. Introducing New Parameter to Cryptography Control and Decontrolling Asymmetric Algorithm. JP008. This proposal is problematic for the U.S. It broadly liberalizes current cryptography controls, removing most (if not all) relevant export controls on symmetric cryptography, asymmetric cryptography (including key exchange/PKI), network-layer encryption (e.g., routers), and 100m wireless (WiFi/802.11x) dual-use commodities, software and technology. Eleven countries were on study reserve at the end of the Spring EG. USDEL should work with others in continuing to raise concerns about this proposal. USDEL should maintain its study reserve. USDEL may draw on the following points as needed:
- -- The scope of this proposal seems quite far reaching.
- -- It raises a great number of questions:
- -- Has Japan studied symmetric key lengths other than 192-bits for all products across the board and 512-bits for routers? Is so, what were the findings?
- $\mbox{--}$ Is there any reason why routers should have a higher key length than the other products?
- -- Japan has provided a definition of encrypted backhaul throughput. Is this an industry standard definition?
- -- The U.S. proposes that interested delegations have a detailed discussion to evaluate the implications of this proposal as well as the other proposals in Cat 5 Part 2.
- 1E. (SBU) 5.A.2. Exclusion of Wireless Personal Area Network (PAN) Encryption Items from 5.A.2. US014 Rev 2. This proposal would add a new decontrol Note specifically addressing wireless PAN products such as wireless keyboards, wireless mice, headsets/headphones,

home/business/industrial automation and systems controllers, etc. The latest revision of this proposal replaced the word "typically" with "nominal" to address the concerns expressed by a number of countries during the Spring EG. Based on feedback the U.S. has received to date, this change appears to have been well received. USDEL should continue to seek consensus on this proposal. USDEL may draw upon the following points as needed (last point addresses the most recent revision):

- -- The U.S. believes that decontrol of personal area networks is warranted as these systems have become quite common and when limited to short range systems, they do not pose a significant security threat.
- -- The definition of a "personal area network" proposed by the U.S. is very similar to that of a "local area network." The difference between the two definitions is in the smaller geographic area covered by the PAN.
- -- Among the short-range wireless technologies that would be released by this proposal are Bluetooth, Wibree and ZigBee.
- -- This proposal would not decontrol local area networks such as those based on the WiFi standard.
- -- To meet the concern expressed by others over use of the word "typically" that would seem to be open to a wide range of interpretation, the U.S. has substituted the "nominal" which has a more precise technical connotation.
- <u>¶F.</u> (SBU) 5.A.2. Decontrol of "software" designed for telecommunication network management. FI002 Rev 1. FI 002 is similar to a recent proposal (SE 001 at the outset of April 2006 EG, before it was scaled back) that the U.S. had serious concerns about and that was not accepted. The U.S. continues to have serious concerns about this proposal. USDEL should continue to engage with Finland and other delegations to address these concerns and maintain a study reserve on this proposal. USDEL may draw on the following points:
- -- The U.S. continues to study FI002 Rev 1.
- -- The U.S. believes that many communications and network infrastructures are secured, monitored and operated with security operations center (SOC) and network operations center (NOC) products that provide hosted $24 \times 7 \times 365$ monitoring and incident response services.
- -- We believe that such 'network operations' are sensitive in nature, similar to 'network user provisioning' functions that FI 002 Rev. 01 does not intend to decontrol.
- -- It appears quite difficult to distinguish 'network user provisioning' from 'network operations' functions, in either a technical or a regulatory sense.
- -- For example, it is unclear whether products in fact exist to exclusively perform network 'operations', and not also network/user 'provisioning' (and vice-versa).
- -- Lastly, it appears that the first two provisos of FI 002 Rev. 01 ('Network management "software" user account protection' and 'Network management "software" protection') may address authentication, access control and anti-virus functions that are not Wassenaar controlled. These provisions, then, may not be a needed change to existing C5P2.
- -- The U.S. looks forward to continuing to work with Finland and other interested delegations on this proposal.

¶G. (SBU) 5.B.2., 5.D.2., and 5.E.2. Clarification of the scope of control. DE008. Germany presented this proposal in the Spring as a counterproposal to US013. While it is not a true counter proposal, it was inspired by US013. It addresses a similar problem in Category 5, Part 2, as US013 addressed in Category 5, Part 1. The U.S. has no technical concerns about this proposal and may join consensus.

VII. CATEGORY 6 - SENSORS AND LASERS

- <u>¶</u>A. 6.A.1.c. Diver Deterrent Acoustic Systems. CA005. This proposal recommends a new control 6.A.1.c. for diver deterrent acoustic systems specially designed or modified to disrupt divers. The U.S. appreciates the additional information provided by Canada during the intersessional meetings. USDEL may join consensus on this proposal.
- 1B. (SBU) 6.A.1.c. Diver Detection Sonars. GB018. This proposal recommends new controls to specify sonar systems (6.A.1.c.) and associated software (6.D.) employed to detect divers and underwater swimmer delivery vehicles having a detection range greater than 30 m. The U.S. continues to study this proposal and believe that it needs further refinement. USDEL should maintain a study reserve on this proposal. USDEL may draw on the following points:
- -- The U.S. appreciates the additional information provided on this proposal during the summer intersessional meetings.
- -- The U.S. still has some questions that it would like to have answered to complete its study of this proposal.
- -- How are these systems to detect divers and underwater swimmer delivery systems different from other systems that might be used to detect fish or marine mammals?
- -- The use of "detection radius" is confusing. The radius is related to the beamwidth. Certain narrow beam object detection or location systems are already specified by 6.A.l.a.l.b.4. The existing control may capture the items of interest.
- -- The U.S. also notes that in its justification, the UK says that it does not wish to control oil pipeline protection systems that have generally only a 25 meter detection radius either side of the pipeline. However, as these systems have a distance between nodes of 1 km, that would seem to indicate that along the axis of the pipeline, the detection range is approximately 500 meters. Is the UK sure that the control text as written would actually exclude these pipeline protection systems?
- 1C. (SBU) (SBU) 6.A.2.b. Remote Sensors. DE005. This proposal is a decontrol for "Monospectral imaging sensors" and "multispectral imaging sensors", designed for remote sensing applications. The proposal would remove the term "Monospectral imaging sensors" and also add the decontrol note; "This item does not apply to sensors or cameras having interchangeable lenses." The rationale provided in DE005 is that the current language controls aerial camera systems used for photogrammetry and geographical surveying as well industrial digital camera bodies incorporating a monospectral (VIS) imaging sensor and having interchangeable lenses providing an IVOF of less than 200 microrad. USDEL should maintain its study reserve on DE005 and offer the solution provided in paragraph 7.B. USDEL may agree to this proposal if the solution offered in paragraph 7.B is accepted. USDEL may draw on the following points:
- -- Following productive discussions in the LLL TWG

during the intersessional meetings, the U.S. believes that a solution can be found for the problems Germany has sought to address in this proposal.

- -- The U.S. looks forward to working with interested delegations in the LLL TWG to find a solution.
- -- We want to thank the Canadian delegation for a rather elegant clarification of the magnetometer control text.
- -- We concur with the Canadian proposal to replace the term "noise level" and its associated definition with the term "sensitity" and a local defition in the proposed technical note.
- -- We have one concern. We want to be assured that the measured sensitivity for which the device is being controlled is related to the best performance of the device rather than the conditions under which it was measured.
- -- We feel that adding the word "device-limited" before the words "noise floor" in the technical note would make this completely clear.
- 1E. (SBU) 6.A.6.a.2. Addition of magnetic gradiometers to Sensitive List. CA002 Rev 1. The proposal would add magnetic gradiometers to the sensitive list. USDEL should support this proposal as revised based on comments by the Russian delegation to include gradiometers incorporating multiple magnetometers specified in 6.A.6.a.1 (in addition to those specified in 6.A.6.a.2). USDEL may draw on the following point:
- -- The U.S. supported this Canadian proposal during the Spring EG. We believe that the Russian comments that led to its revision have improved it. Therefore the U.S. would like to change its position from "support" to "enhanced support".
- 1F. (SBU) 6.A.8.j. Control of airborne LIDAR surveying systems of utility for amphibious warfare. GB011. This proposal continues the work done by the UK in 2007 on this topic. The proposed text is the same as WA-EG (07) GB 008 Rev 3 with the exception of minor amendments inline with the agreed drafting guidelines. This UK proposal would add controls for LIDAR equipment capable of airborne littoral surveying based on the International Hydrographic Organization (IHO) Order 1 Standard for Hydrographic Surveys (Special Publication No. 44, April 1998). The concerns and rationale for control presented in the UK proposal are valid. USDEL may join consensus on this proposal. USDEL may draw on the following points after this proposal has been agreed:
- -- The U.S. believes that GB001 has brought forward an important technology for EG discussion.
- -- The U.S. would like to share ideas with others about future work related to this topic with the possibility of developing a non-paper or a proposal and possible TWG work in 2009.
- ¶G. (SBU) 6.D. IR Camera Frame Rate Software. US016 Rev

- 12. This proposal introduces new software control to close a loophole associated with current decontrols for cameras employing microbolometers. After a lengthy discussion during the intersessional meetings, the U.S. submitted a revised proposal aimed at meeting the concerns stated by others. USDEL may draw on the following points:
- -- The U.S. appreciates the assistance of all those involved in the intersessional LLL TWG discussions that led to the second revision of this proposal.
- -- The U.S. believes that approval of this proposal will close a loophole in the current controls

VIII. CATEGORY 7 - NAVIGATION AND AVIONICS

- (SBU) 7.A.3. Note 2. Inertial equipment and specially designed components exception for civil vessels. DE007. The proposal would add an additional exception to 7.A.3. Currently, Note 2 states, 7.A.3. does not apply to inertial navigation systems which are certified for use on "civil aircraft" by civil authorities of a participating state. This proposal would extend this exception to civil vessels. The U.S. questions asked during the Spring EG have still not been answered. Answers provided at this stage will in all probability require additional time to study. USDEL should remain on study reserve on DE007. USDEL may draw on the following points:
- -- The U.S. requires additional information to fully understand the impact of this proposal.
- -- The military utility of commercial vessels may be very different from that of commercial aircraft.
- -- The proposal states the systems mentioned have no "substantial" military significance. The U.S. would like to more fully understand how this conclusion was reached.
- -- Some of the questions that need to be answered are:
- Is the regulatory standing of the IMO comparable to that of the ICAO?
- Who are the civil authorities who certify civil vessels?
- How wide spread is the use of inertial navigations systems on commercial vessels?
- What are specific examples of the equipment that would be subject to this decontrol? and
- What countries manufacture the equipment?
- -- The US has concerns with inertial navigation equipment and its components. In the past several years, the EG has spent considerable time revising and clarifying these controls. The U.S. needs to fully understand the implications of the current proposal.

IX. CATEGORY 8 - MARINE

- 1A. (SBU) 8.A.1.b. Non-Military Submersibles. GB 001. This proposal revises the current control to capture civilian submersibles now being marketed as they could provide significant military utility. Having reviewed the information provided during the Spring EG, USDEL may join consensus on GB001.
- 1B. (SBU) 8.A.1.j. Non-Military Vessels. CA004. This proposal adds a control for vessels that are not specially designed for military use, but have significant military utility. The U.S. understands that Canada does not plan to push this proposal any further

this year, but will concentrate on the revision of ML9. USDEL should remain on study reserve on this proposal.

¶C. (SBU) 8.A.3. Vessels of Military Significance. GB ¶014. This proposal adds a control for vessels that are not specially designed for military use, but have significant military utility. The U.S. understands that the UK does not intend to proceed with this proposal in 2008 and will concentrate instead on revising ML9. USDEL should remain on study reserve on GB 014.

1X. CATEGORY 9 - AEROSPACE AND PROPULSION

- 1A. (SBU) 9.A.12.b.2. Associated systems, equipment and components. DE006. This proposal modifies the "guidance or control systems" to "systems for navigation, attitude, guidance and control" to be consistent with similar systems controlled under Category 7. During the Spring EG some questions were raised concerning this proposal. After further review, the U.S. decided that further restructuring was needed to clarify this proposal. USDEL main join consensus if satisfied that the wording meets the original intent of the German proposal of clarifying this text.
- ¶B. (SBU) 9.A.12.b.4. UAV Engines and Propellers. GB017. This proposal deletes the 50,000 ft altitude requirement for internal combustion engines and substitutes a power output or cubic capacity and proposed new controls on propellers designed for use on UAVs. This proposal is problematic as witnessed by the fact that 15 countries are on study reserve. USDEL should maintain a study reserve on this proposal. If needed, the talking points from the Spring guidance are still valid.

XI. NON CATEGORY SPECIFIC PROPOSALS

- ¶A. (SBU) Clarification of Basic Scientific Research. General Technology Note. JP001 Rev 1. This proposal attempts to clarify the definition of "basic scientific research." During the summer intersessional meetings, there was a very productive discussion of this proposal. It appears that Japan is wrestling with implementing controls on technology transfers. Part of this exercise may be helping Japan better understand how other participating states address this issue. USDEL should continue to work with Japan on this issue. USDEL should remain on study reserve on JP001 Rev 1.
- 1B. (SBU) Statement of Understanding Components. AU001. This proposal would add a Statement of Understanding that "components," which are both unserviceable and unrepairable, are not controlled. Discussion of this topic at the intersessional meetings left most delegations that participated with the conclusion that this issue should be left to national discretion. It is not clear whether Australia intends to pursue this proposal any further after the intersessional discussions. USDEL should remain on study reserve on AU001. Talking points in the Spring Guidance are still valid.
- 1C. (SBU) Definition of "Software". JP017. This proposal attempts to use the definition of "software" to expand export controls to all software that is designed to improve the performance of an item that is not controlled to one that would be controlled (i.e. to circumvent controls). This proposal was submitted during the Spring EG as a counter-proposal to US016. During intersessional discussion of this proposal, a strong case was made to do this on a case-by-case basis as had been done previously. It is not clear whether Japan intends to pursue this proposal at the Fall EG. The Japanese delegation has repeatedly assured the U.S.

that it does not intend to hold US016 hostage to JP017. No tour de table has ever been made on this proposal. USDEL should place a study reserve on this proposal if a tour de table is taken.

XII. MUNITIONS LIST

- ¶A. (SBU) ML2. Decontrol of tethered projectile launchers. GB016 Rev 1. This proposal adds a decontrol note for projectile launchers specially designed to discharge tethered projectiles (e.g. line throwers) with a range of up to 500 meters. USDEL should ensure that appropriate language is included to exclude weapons and other launchers of concern from this decontrol. USDEL may join a consensus on this proposal if the term "line thrower" or other appropriate limitation is incorporated. USDEL may draw on the following points:
- -- The U.S. supports the intent of decontrolling "line throwers" but is concerned about the possible decontrol of "wire-guided" munitions and other "tethered projectile launchers".
- -- The U.S. has conducted both tethered satellite tests and tethered missile tests to validate and improve engineering designs. The U.S. is concerned the current language might decontrol such items and their associated technology.
- -- In addition, the line should not be capable of communications to not inadvertently decontrol items of concern.
- -- The U.S. could support the use the specific term "line throwers" to limit the decontrol.
- 1B. (SBU) ML7. Clarification of NBC detection, dissemination, protection and decontamination controls. GB009 Rev 2. This proposal attempts to close a potential loophole for NBC detection equipment. The UK revised this proposal twice during the Spring EG with the second revision complying with U.S. suggestions to add "...designed or modified for military..." instead of just "...designed...". However, the U.S. remains concerned about the deletion of "therefor" in the chapeau of ML7.f. USDEL should work with the UK to try to arrive at an acceptable text that closes the existing loophole and does not create another.
- 1C. (SBU) ML9 and 17. Restructure of ML9 and consequential addition to ML17. GB007 Rev 1. proposal attempts to restructure ML9 and include vessels not specially designed for the military that may have military capability. The restructuring of ML9 would have a consequential change to ML17 without changing the scope of control. The intersessional meetings devoted a great deal of time to ML9. There are a number of alternative texts under consideration in WA-EG (08) CRP 1037. A number of delegations have strong reservations about the incorporation of vessels that are not clearly military into ML9. USDEL should continue to work in the Vessels TWG to develop a text that would be acceptable to all delegations and that includes those vessels currently controlled on the USML. USDEL should be on study reserve for any expansion of the controls beyond what is currently controlled on the USML without reference back to Washington.
- 1D. (SBU) ML17. Air Conditioning Units (ACUs). GB012. This proposal adds ACUs, specially designed for military use to the munitions list. It is not clear what differentiates a military air conditioner from a standard commercial air conditioner. USDEL should remain on study reserve on this proposal. USDEL may draw from the following points:

- -- It is not clear to the U.S. what distinguishes the air conditioning units that GB012 proposes to control from standard air conditioning units.
- -- If the air conditioning units offer NBC protection, they are controlled under ML7.f.1. If they do not, it is not clear how these units differ from a normal household or commercial appliance.
- -- The U.S. would like a further explanation of what is entailed with "specially designed for military use" with respect to the air conditioning systems that the UK seeks to control in ML17.
- 1E. (SBU) ML 17.e.3. Clarify Meaning of an Electro-Magnetic Pulse (EMP) Environment. JP009 Rev 2. This proposal clarifies the meaning of Electro-magnetic Pulse (EMP) ML17.e.3. USDEL may join consensus on this proposal.

IF NEEDED

- -- U.S. recognizes that Japan is concerned about the ability to protect against electro-magnetic interference via the use of shielding or limiting devices on commercial equipment. If there is still confusion, the addition of the word "hostile" or "intentionally disruptive" in current control language such as "...for operating in a hostile/intentionally disruptive electro magnetic pulse environment" may be appropriate. This wording allows for greater discrimination between friendly and hostile operating environments.
- -- HEMP does not include other sources of EMP such as high powered microwave weapons.
- -- EMI is low level, unintentional interference.

XIII. US NON-PAPERS

- 1A. (SBU) 1.C.10. Carbon Fibers and Prepreg Materials. US027. This non-paper explores changes in the use of standard modulus carbon fibers. It is intended to open discussion for a review of the controls in 1.C. 10. in light of foreign availability in standard modulus fibers. USDEL may draw on the following points:
- -- U.S. industry has brought to the attention of the U.S. Government the changing nature of the world market for carbon fiber specified by 1.C.10.
- -- The U.S. has begun its own internal review of the current controls and market trends for carbon fiber and would like to share some of the information provided by U.S. industry with our Wassenaar partners.
- 1B. (SBU) 1.C.10. Dry Carbon Fiber for Civil Aircraft Repair. US028. This non-paper discusses concerns raised within the U.S. about the ability of the current decontrol note to adequately meet industry needs for patching civil aircraft. The U.S. would like to share preliminary findings with our WA partners. USDEL may draw on the following points:
- -- U.S. industry has asked the U.S. Government to review the current decontrol note for carbon fibers used for civil aircraft repairs.
- -- The U.S. has begun its own internal review and would like to share with our WA partners the issues that have been considered to date.
- -- The paper list five potential options for modifiying the current decontrol note. The U.S. delegation would appreciate any feedback that other delegations might be

willing to offer with respect to these options.

XIV. FOREIGN AVAILABILTY STUDY

XIV. FOREIGN AVAILABILTY STUDY

1A. (SBU) Based on a request from the Sensors and Instrumentation Technical Advisory Committee (SITAC), the Department of Commerce has initiated a foreign availability study for thermal imaging cameras. In pursuance of that study, the Department of Commerce has requested information from the Department of State concerning the export practices of some of our Wassenaar partners.

¶B. (SBU) U.S. Head of Delegation may approach other delegations to gather information to provide additional detail in response to the questions posed by the Department of Commerce. U.S. Head of Delegation may also organize informal meetings to discuss this issue with selected delegations if that appears appropriate. RICE

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End Cable Text